

CLAIMS

1. Auxiliary element (2) for securement and positioning, to be used pairwise to fix and position a
5 current sensor (1) relative to at least one electrical conductor (3, 4, 31, 32, 33) through which flows a current to be measured, said auxiliary element (2) comprising a plate (20) having an internal surface (201) adapted to be applied against a large surface (11) of the sensor (1) and
10 an external surface (200) which carries, along a first edge (202), two spaced securement tongues (203) which extend outwardly at a right angle relative to said external surface (200) and in which is formed a first pair of passages (204, 205) for first screws permitting the
15 securement of the auxiliary element (2) on a support (S), said plate (20) comprising a passage opening (210) for the electrical conductor and, symmetrically on opposite sides of said opening (210), a second pair of passages (207) for second screws (62) permitting the securement of the plate
20 (20) to the sensor (1), characterized in that the passage opening (210) for the conductor is constituted by a recess (210) formed in a second edge (206) of the plate (20) opposite the first edge (202), and passages of the second pair of passages (207) are constituted by two parallel
25 slots which extend perpendicularly to the first edge (202) of the plate (20).

2. Auxiliary element according to claim 1, characterized in that the external surface (200) of the
30 plate (20) carries graduations (208) along at least one side of the slots (207).

3. Auxiliary element according to claim 1 or according to claim 2, characterized in that the two securement tongues (203) are connected to each other by a rib (230) running along the first edge (202) of the external surface (200) of the plate (20) and formed in a single piece with the plate (20), said rib (230) being adapted to come into contact with the conductor (3) in a first assembly mode of the auxiliary element (2) on the large surface (11) of the sensor (1).

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4. Auxiliary element according to claim 3, characterized in that the rib (230) comprises at its middle a concave portion (231) adapted to come into contact with a portion of the external surface of an electrical cable (4) forming said electrical conductor.

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5. Auxiliary element according to any one of claims 1 to 4, characterized in that the recess (210) for the passage of the conductor comprises two edges (211) disposed obliquely in V arrangement and having a longitudinal profile in the form of a staircase.

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6. Auxiliary element according to claim 5, characterized in that the staircase profile of the two edges (211) of the recess (210) has pairs of homologous vertical portions (212, 214, 216), the homologous vertical portions of each pair being spaced a distance corresponding to a normalized width of a conductive bar (31, 32, 33) serving as an electrical conductor and pairs of homologous horizontal portions (213, 215, 217) adapted to come into contact with a surface of said conductive bar (31, 32, 33)

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in a second mounting mode of the auxiliary element (2) on the large surface (11) of the sensor (1).

7. Auxiliary element according to any one of claims 1 to 6, characterized in that the external surface (200) of the plate (2) carries a pair of spaced parallel columns (220) which extend along the external surface (200) perpendicular to the first edge (202) of this latter and which each comprise a longitudinal hole (222) for a gripping screw (63).

8. Auxiliary element according to any one of claims 1 to 7, characterized in that the external surface (200) of the plate (20) bears a second central small column (221), which extends along the external surface (200) perpendicular to the first edge (202) of this latter and which comprises a longitudinal hole (222) for a gripping screw.

9. Assembly comprised by a current sensor (1) having a housing (10) of parallelepipedal shape with two large surfaces (11) traversed by an opening (12) of closed contour, dimensioned to permit the passage of at least one electrical conductor having a transverse cross-section having dimensions comprised within a predetermined range, and two auxiliary elements (2) for the securement and positioning of the sensor (1) relative to said conductor, characterized in that each of the two auxiliary elements is an auxiliary element (2) according to any one of claims 1 to 8.